

IN THE CLAIMS

Please cancel claims 74 - 79. Please add claims 80 - 86 as set forth in Exhibit B. Claim 73 remains and is shown as entered by examiner's amendment.

CONCLUSION

Applicants respectfully request that the foregoing preliminary amendments be entered before examination of the above-identified application and before calculation of the filing fee. The claims of this preliminary amendment are fully supported in the specification. The Commissioner is authorized to charge the amount due to Bingham McCutchen Deposit Account No. 50-2518, Billing No. 0045807-7011663004.

Respectfully submitted,

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EXHIBIT A

RELATED APPLICATIONS

This application is a divisional of prior U.S. Application Ser. No. 09,527,745, filed 17 March 2000, which is a divisional of U.S. Application Ser. No. 09/265,315, filed 9 March 1999, now abandoned, which is a divisional of U.S. Application Ser. No. 08/714,918, filed September 13, 1996, now U.S. Pat. No. 6,037,123, which claims the benefit of U.S. Provisional Application Ser. No. 60/009,102, filed 22 December 1995.

EXHIBIT B

73. (Previously amended) A method of screening for an anti-bacterial agent, comprising:

providing a wild type species of a bacterium comprising a nucleic acid comprising the sequence of SEQ. ID No. 44;

providing a mutant strain of the species, wherein:

the mutant strain comprises a mutation in a nucleic acid comprising SEQ. ID. No. 44, the mutation being within SEQ. ID. No. 44, wherein the mutant gene encodes an expression product that confers on the mutant strain a conditional growth phenotype, that is, the mutant strain is able to grow normally at a first level, the permissive level, of a cultural condition, but is not able to grow at a second level, the non-permissive level, of the cultural condition and is able to grow, but growth is hypersensitive to a compound that affects a biological pathway involving the expression product, at a level, the semi-permissive level, between the first and second levels of the cultural condition;

contacting the mutant strain with a test compound at the semi-permissive level; and,

comparing the growth of the mutant strain at the semi-permissive level in the presence of the test compound with its growth at the semi-permissive level in the absence of the test compound; wherein:

if the growth of the mutant strain in the presence of the test compound is inhibited compared to its growth in the absence of the test compound, the test compound is an anti-bacterial agent with activity against the encoded product of the mutated gene.

74-79. (Canceled)

80. (New) A method of screening for an anti-bacterial agent, comprising:

providing a wild type species of a bacterium comprising a nucleic acid comprising the sequence of SEQ. ID No. 47;

providing a mutant strain of the species, wherein:

the mutant strain comprises a mutation in a nucleic acid comprising SEQ. ID. No. 47, the mutation being within SEQ. ID. No. 44, wherein the mutant gene encodes an expression product that confers on the mutant strain a conditional growth phenotype, that is, the mutant strain is able to grow normally at a first level, the permissive level, of a cultural condition, but is not able to grow at a second level, the non-permissive level, of the cultural condition and is able to grow, but growth is hypersensitive to a compound that affects a biological pathway involving the expression product, at a level, the semi-permissive level, between the first and second levels of the cultural condition;

contacting the mutant strain with a test compound at the semi-permissive level; and,

comparing the growth of the mutant strain at the semi-permissive level in the presence of the test compound with its growth at the semi-permissive level in the absence of the test compound; wherein:

if the growth of the mutant strain in the presence of the test compound is inhibited compared to its growth in the absence of the test compound, the test compound is an anti-bacterial agent with activity against the encoded product of the mutated gene.

81. (New) The method of claim 80, further comprising:

contacting the wild type strain with the test compound at the semi-permissive level; and,

comparing the growth of the mutant strain at the semi-permissive level in the presence of the test compound with the growth of the wild type strain at the semi-permissive level in the presence of the test compound, wherein:

if the growth of the mutant strain is inhibited compared to the growth of the wild type strain, the test compound is an anti-bacterial agent that acts on a biochemical pathway comprising the expression product.

82. (New) The method of claim 80, further comprising:

contacting the mutant strain at the semi-permissive level with a known anti-bacterial agent having a known mechanism of action; and,

comparing the growth of the mutant strain at the semi-permissive level in the presence of the test compound with its growth at the semi-permissive level in the presence of the known anti-bacterial agent, wherein:

if the growth of the mutant strain is inhibited both in the presence of the test compound and in the presence of the known anti-bacterial agent, the test compound is an anti-bacterial agent having the same mechanism of action as the known anti-bacterial agent.

83. (New) The method of any one of claims 80, 81 or 82, wherein the cultural condition is temperature.

84. (New) The method of any of claims 80, 81 or 82, wherein the bacterial species is selected from the group consisting of the genera *Staphylococcus*, *Streptococcus*, *Bacillus*, *Escherichia* and *Haemophilus*.

85. (New) The method of claim 84, wherein the bacterial species is selected from the group consisting of *Staphylococcus aureus*, *Staphylococcus epidermidis*, *Bacillus subtilis*, *Escherichia coli*, *Salmonella typhimurium*, *Streptococcus pyogenes*, *Streptococcus pneumoniae* and *H. influenza*.

86. (New) The method of claim 85, wherein the bacterial species is *Staphylococcus aureus*.